

July 20, 2021

Mr. David Albright  
Manager, Groundwater Protection Section  
USEPA Region 9 (WTR-4-2)  
75 Hawthorne St  
San Francisco, CA 94105

Subject: Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1  
Monthly Update for AL/AQL Exceedances at Supplemental Monitoring Well M59-O

Dear Mr. Albright:

Florence Copper is providing this monthly update of supplemental monitoring well M59-O alert level (AL) and/or Aquifer Quality Limit (AQL) exceedances under Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1 (Permit).

Florence Copper has been voluntarily monitoring M59-O monthly for the parameters listed in Table 1, and previously submitted a monthly report on June 23, 2021. The Table below has been updated to include the most recent laboratory results from the monthly sample collected on June 1, 2021.

Table 1. M59-O Sampling Results

Parameter	AL	AQL	12/28/20	1/18/21	2/22/21	3/23/21	4/14/21	5/19/21	6/01/21
Magnesium (mg/L)	23	--	<b>57.2</b>	<b>63.1</b>	<b>26.5</b>	19.1	19.8	<b>65.6</b>	<b>59.8</b>
Sulfate (mg/L)	202	--	<b>865</b>	<b>960</b>	<b>383</b>	<b>228</b>	<b>249</b>	<b>999</b>	<b>850</b>
Total dissolved solids (TDS) (mg/L)	854	--	<b>1,860</b>	<b>1800</b>	<b>970</b>	762	780	<b>2010</b>	<b>1900</b>
Total Uranium (mg/L)	0.0052	--	0.037	0.038	<b>0.0088</b>	0.003	0.0038	<b>0.0096</b>	<b>0.0117</b>
Adjusted gross alpha (pCi/L)	15.8	15.8	<b>73.5 ± 3.7</b>	<b>35.4 ± 2.5</b>	<b>17.9±1.4</b>	<b>18.8±1.5</b>	<b>18.1±1.2</b>	<b>49.1±2.1</b>	<b>57.3±2.9</b>
Radium 226+228 (pCi/L)	6.9	6.9	<b>19.8 ± 0.8</b>	<b>22.0 ±0.8</b>	6.2±0.5	<b>7.0±0.6</b>	<b>10.9±0.7</b>	<b>18.0±0.8</b>	<b>13.6±0.7</b>
Gross beta (pCi/L)	16	16	<b>43.2±2.7</b>	<b>52.7±3.0</b>	NA	NA	<b>19.6±1.9</b>	<b>49.4±2.1</b>	<b>36.9±2.9</b>

**BOLD** values are exceedances of AL and/or AQL

NA: not analyzed

The BHP Copper Evaporation Pond was put into service on July 8, 2021. Operation of this Pond increases Florence Copper's capacity to store and evaporate neutralized solutions, and enables significantly higher recovery rates in the wellfield. The higher recovery rates, and other adjustments to flows in the wellfield, should advance rinsing activities, and mitigate the exceedances.

Florence Copper will continue monthly sampling of supplemental monitoring well M59-O for parameters which exceeded the ALs and AQLs, and will report these results monthly to EPA until all concentrations are below the ALs and AQLs.

Please feel free to contact me should you have any questions or comments.

Sincerely,  
**Florence Copper, Inc.**



Brent Berg  
General Manager

Cc: Nancy Rumrill, EPA Region 9  
Maribeth Greenslade, ADEQ